

YOU HAVE REQUESTED DATA FROM 10 ANSWERS - CONTINUE? Y/(N):y

L2 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 2004:490265 CAPLUS

DN 141:52841

TI Cloning and characterization of genes encoding culture filtrate antigens involved in protective immunity to M. tuberculosis, and use thereof as vaccines and in diagnosis

IN Andersen, Peter; Skiot, Rikke; Oettinger, Thomas; Rasmussen, Peter Birk; Rosenkrands, Ida; Weldingh, Karin; Florio, Walter

PA Den.

SO U.S. Pat. Appl. Publ., 109 pp., Cont.-in-part of U.S. 6,641,814.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004115211	A1	20040617	US 2003-620246	20030715
	US 6641814	B1	20031104	US 1998-50739	19980330
	EP 1449922	A2	20040825	EP 2004-76605	19980401
	EP 1449922	A3	20041117		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

	US 2002094336	A1	20020718	US 2001-791171	20010220
PRAI	DK 1997-376	A	19970402		
	US 1997-44624P	P	19970418		
	DK 1997-1277	A	19971110		
	US 1998-70488P	P	19980105		
	US 1998-50739	A2	19980330		
	DK 1998-1281	A	19981008		
	EP 1998-913536	A3	19980401		

AB The present invention is based on the identification and characterization of a number of M. tuberculosis derived antigens, isolated from culture filtrates of T cells from memory immune mice by T cell epitope mapping. The invention is directed to the polypeptides and immunol. active fragments thereof, the genes encoding them, immunol. compns. such as vaccines and skin test reagents containing the polypeptides. Another part of the invention is based on the surprising discovery that fusions between ESAT-6 and MPT59 are superior immunogens compared to each of the unfused proteins, resp. These antigens are suitable for use in vaccines and in diagnosis of infections.

L2 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2

AN 2004:59568 CAPLUS

DN 140:127185

TI Antigens from Mycobacterium as vaccine and uses in tuberculosis diagnosis and treatment

IN Andersen, Peter; Skjot, Rikke Louise Vinther; Okkels, Li Mei Meng; Brock, Inger; Oettinger, Thomas

PA Den.

SO U.S. Pat. Appl. Publ., 27 pp., Cont.-in-part of U.S. Ser. No. 804,980.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004013685	A1	20040122	US 2001-872505	20010601
	EP 1449922	A2	20040825	EP 2004-76605	19980401
	EP 1449922	A3	20041117		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

	WO 2001004151	A2	20010118	WO 2000-DK398	20000713
	WO 2001004151	A3	20010712		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003147897 A1 20030807 US 2001-804980 20010313
PRAI DK 1997-1277 A 19971110
US 1998-70488P P 19980105
US 1998-246191 B2 19981230
DK 1999-1020 A 19990713
US 1999-144011P P 19990715
US 2000-615947 A2 20000713
WO 2000-DK398 A2 20000713
US 2001-804980 A2 20010313
DK 1993-798 A 19930702
US 1993-123182 B2 19930920
WO 1994-DK273 A2 19940701
US 1995-465640 A1 19950605
DK 1997-376 A 19970402
US 1997-44624P P 19970418
EP 1998-913536 A3 19980401
US 1999-289388 B2 19990412

AB The present invention is based on the identification and characterization of 3 antigens, including Rv2653c, Rv2654c and **RD1-ORF5**, from Mycobacterium tuberculosis. The invention is directed to the polypeptides and immunol. active fragments thereof, the genes encoding them, immunol. compns. such as diagnostic reagents containing the polypeptides. The invention related to diagnosing tuberculosis caused by virulent mycobacteria in an animal, including a human being. The invention related to treating tuberculosis using antigens isolated from Mycobacterium tuberculosis.

L2 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:60336 CAPLUS

DN 140:144681

TI Mycobacterium low oxygen-induced antigens and genes for vaccines or diagnostics of tuberculosis

IN Andersen, Peter; Rosenkrands, Ida; Stryhn, Anette

PA Statens Serum Institut, Den.

SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004006952	A2	20040122	WO 2003-DK477	20030708
	WO 2004006952	A3	20040318		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1523331	A2	20050420	EP 2003-763613	20030708
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2004057963	A1	20040325	US 2003-617038	20030711
PRAI	DK 2002-1098	A	20020713		
	US 2002-401725P	P	20020807		
	WO 2003-DK477	W	20030708		

AB The present invention is based on a number of M. tuberculosis derived proteins and protein fragments which are induced during the latent stage of infection characterized by low oxygen tension in the microenvironment

of the infecting TB-bacteria. The invention is directed to the use of these polypeptides, immunol. active fragments thereof and the genes encoding them for immunol. compns. such as therapeutic vaccines and diagnostic reagents.

L2 ANSWER 4 OF 10 USPATFULL on STN

AN 2004:76186 USPATFULL

TI Therapeutic TB vaccine

IN Andersen, Peter, Bronshoj, DENMARK

Rosenkrands, Ida, Vaerloose, DENMARK

Stryhn, Anette, Virum, DENMARK

PI US 2004057963 A1 20040325

AI US 2003-617038 A1 20030711 (10)

PRAI DK 2002-1098 20020713

US 2002-401725P 20020807 (60)

DT Utility

FS APPLICATION

LREP HOWSON AND HOWSON, ONE SPRING HOUSE CORPORATION CENTER, BOX 457, 321

NORRISTOWN ROAD, SPRING HOUSE, PA, 19477

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 6018

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Therapeutic vaccines comprising polypeptides expressed during the latent stage of mycobacteria infection are provided, as are multiphase vaccines, and methods for treating and preventing tuberculosis.

L2 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

AN 2003:696302 CAPLUS

DN 139:229237

TI Protein and DNA sequences of antigens from Mycobacterium and uses in tuberculosis diagnosis and treatment

IN Andersen, Peter; Weldingh, Karin; Hansen, Christina Veggerby; Florio, Walter; Okkels, Li Mei Meng; Skjot, Rikke Louise Vinther; Rasmussen, Peter Birk

PA Den.

SO U.S. Pat. Appl. Publ., 53 pp., Cont.-in-part of U.S. Ser. No. 60,428.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003165525	A1	20030904	US 2002-138473	20020502
	US 6641814	B1	20031104	US 1998-50739	19980330
	EP 1449922	A2	20040825	EP 2004-76605	19980401
	EP 1449922	A3	20041117		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	US 2002094336	A1	20020718	US 2001-791171	20010220
PRAI	DK 1997-376	A	19970402		
	US 1997-44624P	P	19970418		
	DK 1997-1277	A	19971110		
	US 1998-70488P	P	19980105		
	US 1998-50739	A2	19980330		
	DK 1998-1281	A	19981008		
	US 2001-791171	B2	20010220		
	US 2002-60428	A2	20020129		
	EP 1998-913536	A3	19980401		

AB The present invention is based on the identification and characterization of 9 antigens, including Rv0652/CFP16, Rv2462c/TB51, Rv1984c/CFP21, Rv2185c/TB16, Rv1636/TB15A, Rv3451/CFP23, Rv3872/RD1-ORF3, Rv3354/CFP8A and Rv2623/TB32, from Mycobacterium tuberculosis. The invention is directed to the polypeptides and immunol. active fragments thereof, the genes encoding them, immunol. compns. such as diagnostic reagents containing the polypeptides. The invention related to diagnosing tuberculosis caused by virulent mycobacteria, e.g. by Mycobacterium tuberculosis, Mycobacterium africanum or Mycobacterium bovis, in an animal, including a

human being. The invention related to treating tuberculosis using antigens isolated from Mycobacterium tuberculosis.

L2 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4
AN 2003:609858 CAPLUS
DN 139:163576
TI Mycobacterium tuberculosis antigens for diagnosis, prevention and treatment of infections caused by species of the tuberculosis complex
IN Andersen, Peter; Skjot, Rikke Louise Vinther
PA Den.
SO U.S. Pat. Appl. Publ., 135 pp., Cont.-in-part of U.S. Ser. No. 289,388, abandoned.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003147897	A1	20030807	US 2001-804980	20010313
	WO 9501441	A1	19950112	WO 1994-DK273	19940701
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	EP 1508339	A1	20050223	EP 2004-77505	19940701
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI				
	US 5955077	A	19990921	US 1995-465640	19950605
	EP 1449922	A2	20040825	EP 2004-76605	19980401
	EP 1449922	A3	20041117		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	US 2004013685	A1	20040122	US 2001-872505	20010601
PRAI	DK 1993-798	A	19930702		
	US 1993-123182	B2	19930920		
	WO 1994-DK273	A2	19940701		
	US 1995-465640	A1	19950605		
	DK 1997-376	A	19970402		
	US 1997-44624P	P	19970418		
	DK 1997-1277	A	19971110		
	US 1998-70488P	P	19980105		
	US 1999-289388	B2	19990412		
	EP 1994-919574	A3	19940701		
	EP 1998-913536	A3	19980401		
	US 1998-246191	B2	19981230		
	DK 1999-1020	A	19990713		
	US 1999-144011P	P	19990715		
	US 2000-615947	A2	20000713		
	WO 2000-DK398	A2	20000713		
	US 2001-804980	A2	20010313		

AB The present invention is based on the identification and characterization of a number of novel M. tuberculosis derived proteins and protein fragments, e.g. TB10.3 (ORF7-1 or Rv3019c), TB10.4 (CFP7 or Rv0288) and TB12.9 (ORF7-2 or Rv3017c), ESAT-6, MPT64, CFP10, RD1-ORF5, RD1-ORF2, Rv1036, Ag85A, Ag85B, Ag85C, 19 kDa lipoprotein, MPT32, MPB59 and α -crystallin. The invention is directed to the polypeptides and immunol. active fragments thereof, the genes encoding them, immunol. compns. such as vaccines and skin test reagents containing the polypeptides.

L2 ANSWER 7 OF 10 USPATFULL on STN
AN 2003:291011 USPATFULL
TI Nucleic acids fragments and polypeptide fragments derived from M. tuberculosis
IN Andersen, Peter, Br.o slashed.nsh.o slashed.j, DENMARK
Nielsen, Rikke, Frederiksberg, DENMARK
Oettinger, Thomas, Hellerup, DENMARK
Rasmussen, Peter Birk, K.o slashed.benhaven, DENMARK
Rosenkrands, Ida, K.o slashed.benhaven, DENMARK

Weldingh, Karin, K.o slashed.benhaven, DENMARK
 Florio, Walter, Frederiksberg, DENMARK
 PA Statens Serum Institut, Copenhagen, DENMARK (non-U.S. corporation)
 PI US 6641814 B1 20031104
 AI US 1998-50739 19980330 (9)
 PRAI DK 1997-376 19970402
 US 1997-44624P 19970418 (60)
 DT Utility
 FS GRANTED
 EXNAM Primary Examiner: Swartz, Rodney P
 LREP Frommer Lawrence & Haug, Kowalski, Thomas J.
 CLMN Number of Claims: 43
 ECL Exemplary Claim: 1
 DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
 LN.CNT 5870
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention is based on the identification and characterization of a number of M. tuberculosis derived novel proteins and protein fragments (SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, 17-23, 42, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72-86, 88, 90, 92, 94, 141, 143, 145, 147, 149, 151, 153, and 168-171). The invention is directed to the polypeptides and immunologically active fragments thereof, the genes encoding them, immunological compositions such as vaccines and skin test reagents containing the polypeptides. Another part of the invention is based on the surprising discovery that fusions between ESAT-6 and MPT59 are superior immunogens compared to each of the unfused proteins, respectively.
 L2 ANSWER 8 OF 10 USPATFULL on STN
 AN 2002:314395 USPATFULL
 TI Hybrids of M. tuberculosis antigens
 IN Andersen, Peter, Bronshoj, DENMARK
 Olsen, Anja Weinreich, Soborg, DENMARK
 Skjot, Rikke Louise Vinther, Hedehusene, DENMARK
 Rasmussen, Peter Birk, Frederiksberg, DENMARK
 PI US 2002176867 A1 20021128
 AI US 2001-805427 A1 20010313 (9)
 RLI Continuation-in-part of Ser. No. US 1998-246191, filed on 30 Dec 1998, ABANDONED
 PRAI DK 1997-1277 19971110
 US 1998-70488P 19980105 (60)
 US 1997-44624P 19970418 (60)
 DT Utility
 FS APPLICATION
 LREP Thomas J. Kowalski, c/o FROMMER LAWRENCE & HAUG LLP, 745 Fifth Avenue, New York, NY, 10151
 CLMN Number of Claims: 25
 ECL Exemplary Claim: 1
 DRWN 10 Drawing Page(s)
 LN.CNT 2157
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 AB The present invention discloses fusion proteins of the immunodominant antigens ESAT-6 and Ag85B from Mycobacterium tuberculosis or homologues thereof, and a tuberculosis vaccine based on the fusion proteins, which vaccine induces efficient immunological memory.
 L2 ANSWER 9 OF 10 USPATFULL on STN
 AN 2002:178550 USPATFULL
 TI Nucleic acid fragments and polypeptide fragments derived from M. tuberculosis
 IN Andersen, Peter, Bronshoj, DENMARK
 Nielsen, Rikke, Frederiksberg C, DENMARK
 Oettinger, Thomas, Hellerup, DENMARK
 Rasmussen, Peter Birk, Kobenhaven O, DENMARK
 Rosenkrands, Ida, Kobenhaven O, DENMARK
 Weldingh, Karin, Kobenhaven N, DENMARK
 Florio, Walter, Frederiksberg C, DENMARK
 PA STATENS SERUM INSTITUT (non-U.S. corporation)
 PI US 2002094336 A1 20020718

AI US 2001-791171 A1 20010220 (9)
RLI Division of Ser. No. US 1998-50739, filed on 30 Mar 1998, PENDING
PRAI DK 1997-376 19970402
DK 1997-1277 19971110
US 1997-44624P 19970418 (60)
US 1998-70488P 19980105 (60)

DT Utility
FS APPLICATION
LREP FROMMER LAWRENCE & HAUG LLP, 745 FIFTH AVENUE, NEW YORK, NY, 10151
CLMN Number of Claims: 53
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)

LN.CNT 6134

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is based on the identification and characterization of a number of M. tuberculosis derived novel proteins and protein fragments (SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16, 17-23, 42, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72-86, 88, 90, 92, 94, 141, 143, 145, 147, 149, 151, 153, and 168-171). The invention is directed to the polypeptides and immunologically active fragments thereof, the genes encoding them, immunological compositions such as vaccines and skin test reagents containing the polypeptides. Another part of the invention is based on the surprising discovery that fusions between ESAT-6 and MPT59 are superior immunogens compared to each of the unfused proteins, respectively.

L2 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:684968 CAPLUS

DN 129:300060

TI Novel antigens of Mycobacterium tuberculosis culture filtrates and the genes encoding and their diagnostic and prophylactic use

IN Andersen, Peter; Nielsen, Rikke; Rosenkrands, Ida; Weldingh, Karin; Rasmussen, Peter Birk; Oettinger, Thomas; Florio, Walter

PA Statens Serum Institut, Den.

SO PCT Int. Appl., 264 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9844119	A1	19981008	WO 1998-DK132	19980401
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2285625	AA	19981008	CA 1998-2285625	19980401
	AU 9868204	A1	19981022	AU 1998-68204	19980401
	AU 740545	B2	20011108		
	EP 972045	A1	20000119	EP 1998-913536	19980401
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001515359	T2	20010918	JP 1998-541074	19980401
	EP 1449922	A2	20040825	EP 2004-76605	19980401
	EP 1449922	A3	20041117		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	CA 2319380	AA	19990520	CA 1998-2319380	19981008
	WO 9924577	A1	19990520	WO 1998-DK438	19981008
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,				

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1029053 A1 20000823 EP 1998-947412 19981008
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

NZ 504951 A 20010629 NZ 1998-504951 19981008

AU 750173 B2 20020711 AU 1998-94338 19981008

EP 1484405 A1 20041208 EP 2004-77071 19981008

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI, CY

PRAI DK 1997-376 A 19970402

US 1997-44624P P 19970418

DK 1997-1277 A 19971110

US 1998-70488P P 19980105

EP 1998-913536 A3 19980401

WO 1998-DK132 W 19980401

EP 1998-947412 A3 19981008

WO 1998-DK438 W 19981008

AB Culture filtrate antigens of Mycobacterium tuberculosis are characterized and cDNAs encoding them are cloned. Some of the proteins are antigenic and suitable for use in vaccines and in diagnosis of infections, e.g. skin tests. A fusion protein of two of these antigens is a superior immunogen compared to the unfused proteins. Individual antigens from culture filtrates were identified by T cell mapping using T cells from memory immune mice. Genes for individual antigens were then cloned by screening a λ gt11 expression vector with monoclonal antibodies. Manufacture of individual antigens with hexahistidine affinity labels is described.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT